

Attorney Docket No.  
VIGN1370-1

10/036,980  
Customer ID: 44654

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1. (Currently Amended) A system for interfacing applications comprising computer executable software instructions stored on a computer readable memory, said computer executable software instructions operable to implement:

a public application program interface (public API) layer useful for writing applications consistent with a set of heterogeneous vendor-specific workflow engines,

wherein each workflow engine is a software program operable to manipulate content items in accordance with a process definition,

wherein said public API layer includes a set of generic objects representing functional characteristics common to said set of heterogeneous vendor-specific workflow engines,

wherein each of said set of generic objects is a self-contained data entity,

wherein said set of generic objects comprises a generic process definition object, and

wherein each of said set of heterogeneous vendor-specific workflow engines comprises an engine-specific application program interface (engine-specific API); and an API adapter layer having a plurality of adapters for translating instructions from said public API layer to vendor-specific instructions,

wherein each adapter is configured to interface with ~~a workflow engine application program interface (workflow engine API)~~ an engine-specific API,

~~wherein each workflow engine API is associated with an underlying workflow engine of said set of heterogeneous vendor-specific workflow engines,~~ and

~~wherein each adapter is operable to map said set of generic objects to a set of native objects for a corresponding underlying workflow engine,~~ and

wherein each of said plurality of adapters is operable to translate said generic process definition object into a native process definition object for said corresponding underlying workflow engine.

2. (Cancelled).

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3. (Currently Amended) The system of Claim 1, said computer executable software instructions further operable to implement a content management layer, wherein said set of generic objects further comprises a payload object for indexing content items that are the subject of a process instance, wherein said process instance is an invocation of ~~a~~ the process definition.
4. (Previously Presented) The system of Claim 3, wherein indexed content items are searchable by said applications via said content management layer.
5. (Previously Presented) The system of Claim 1, wherein each of said set of heterogeneous vendor-specific workflow engines maintains and operates with a vendor-specific process definition representation and wherein said applications are written to a standard process definition representation maintained at said public API layer.
6. (Previously Presented) The system of Claim 1, wherein said set of generic objects are maintained at said public API layer according to a workflow reference model promulgated by the Workflow Management Coalition.
7. (Previously Presented) The system of Claim 6, wherein said set of generic objects comprises a WfDefinition object, a WfProcessMgr object, a WfProcess object, a WfRequestor object, a WfActivity object, a WfAssignment object, a WfResource object, a WfEventAuditBundle object, a WfUser object, a WfGroup object, and a WfRole object.
8. (Original) The system of Claim 7, wherein said set of generic objects further comprises a WfPayload object.

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9. (Currently Amended) A system for interfacing workflow applications comprising computer executable software instructions stored on a computer readable medium, said computer executable software instructions operable to implement:

a first workflow engine;

a first workflow engine application program interface (workflow engine API) associated with said first workflow engine, wherein said first workflow engine API comprises a first set of native objects;

a second workflow engine;

a second workflow engine API associated with said second workflow engine, wherein said second workflow engine API comprises a second set of native objects, wherein said first workflow engine and said second workflow engine are heterogeneous vendor-specific workflow engines;

a public application program interface (public API) layer comprising a set of generic objects representing functional characteristics common to the heterogeneous vendor-specific workflow engines, wherein said set of generic objects comprises a generic process definition object; and

an API adapter layer comprising:

a first adapter configured to map said set of generic objects of said public API layer to said first set of native objects of said first workflow engine API, wherein said first adapter is operable to translate said generic process definition object into a first native process definition object; and

a second adapter configured to map said set of generic objects of said public API layer to said second set of native objects of said second workflow engine API, wherein said second adapter is operable to translate said generic process definition object into a second native process definition object.

10. (Cancelled).

11. (Previously Presented) The system of Claim 9, said computer executable software instructions further operable to implement a content management layer, wherein said set of generic objects further comprises a payload object for indexing content items that are the subject of a process instance, wherein said process instance is an invocation of a process definition.

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12. (Previously Presented) The system of Claim 11, wherein indexed content items are searchable by one or more applications via said content management layer.

13. (Previously Presented) The system of Claim 9, wherein each of said first and second workflow engines maintains and operates with a vendor-specific process definition representation.

14. (Previously Presented) The system of Claim 9, wherein said set of generic objects are maintained at said public API layer according to a workflow reference model promulgated by the Workflow Management Coalition.

15. (Previously Presented) The system of Claim 14, wherein said set of generic objects comprises a WfDefinition object, a WfProcessMgr object, a WfProcess object, a WfRequestor object, a WfActivity object, a WfAssignment object, a WfResource object, a WfEventAuditBundle object, a WfUser object, a WfGroup object, and a WfRole object.

16. (Previously Presented) The system of Claim 15, wherein said set of generic objects further comprises a WfPayload object.

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17. (Currently Amended) A computer-implemented method for integrating workflow engines comprising:

creating a public application program interface (public API) layer for at least two heterogeneous underlying workflow engines, wherein the public API layer comprises a set of generic objects,

wherein said set of generic objects represent functional characteristics common to said at least two heterogeneous underlying workflow engines,

wherein each of the at least two heterogeneous underlying workflow engines is a computer executable application program operable to manipulate content items in accordance with a process definition,

wherein each of said at least two heterogeneous underlying workflow engines has an associated engine-specific application program interface (workflow engine API) and a set of native objects;

interfacing said public API layer with said at least two heterogeneous underlying workflow engines through an API adapter layer having a plurality of adapters, wherein each workflow engine API associated with said at least two heterogeneous underlying workflow engines corresponds to one of said plurality of adapters of said API adapter layer; and mapping said set of generic objects of said public API layer to native objects of each of said at least two heterogeneous underlying workflow engines to integrate said at least two heterogeneous underlying workflow engines to said public API layer; and translating a generic process definition object into a native process definition object.

18. (Currently Amended) The method of Claim 17, further comprising:  
persistently maintaining a the generic process definition object; and  
delegating at least a portion of said set of generic objects of said public API layer to a set of corresponding native objects at one or more of said underlying workflow engines.

19. (Currently Amended) The method of Claim 18, further comprising ~~translating said generic process definition object into a native process definition object and~~ persistently maintaining said native process definition object.

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20. (Currently Amended) The method of Claim 17, further comprising:  
receiving a call from an application understandable by a generic object of said ~~public~~  
API layer set of generic objects;  
mapping said call from said application to a native call understandable by a native object  
of a workflow engine API;  
executing said native call to generate a native result; and  
mapping said native result to a generic result usable by a generic object of said ~~public~~  
API layer set of generic objects.
21. (Currently Amended) The method of Claim 17, further comprising creating a content  
management layer, wherein said set of generic objects further comprises a payload object for  
indexing content items that are the subject of a process instance, wherein said process  
instance is an invocation of a the process definition.
22. (Previously Presented) The method of Claim 21, wherein indexed content items are  
searchable via said content management layer.
23. (Currently Amended) The method of Claim 17, wherein each of said ~~set of~~ at least two  
heterogeneous underlying workflow engines maintains and operates with a vendor-specific  
process definition representation.
24. (Previously Presented) The method of Claim 17, wherein said set of generic objects are  
maintained at said public API layer according to a workflow reference model promulgated by  
the Workflow Management Coalition.
25. (Previously Presented) The method of Claim 24, wherein said set of generic objects  
comprises a WfDefinition object, a WfProcessMgr object, a WfProcess object, a WfRequestor  
object, a WfActivity object, a WfAssignment object, a WfResource object, a  
WfEventAuditBundle object, a WfUser object, a WfGroup object, and a WfRole object.
26. (Previously Presented) The method of Claim 25, wherein said set of generic objects  
further comprises a WfPayload object.

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27. (Currently Amended) A computer-implemented method for providing a standardized application program interface between a plurality of software applications and a plurality of workflow engines, said method comprising:

creating and maintaining a public application program interface (public API) layer comprising a set of generic software objects;

wherein said set of generic software objects represent functional characteristics common to at least two heterogeneous workflow engines;

wherein each of said at least two heterogeneous workflow engines is a computer executable application program operable to manipulate content items in accordance with a process definition;

wherein each of said at least two heterogeneous workflow engines has an engine-specific workflow engine application program interface (workflow engine API) associated therewith;

wherein each workflow engine API comprises a set of native software objects;  
and

wherein the workflow engine APIs of said at least two heterogeneous workflow engines are vendor-specific; and

translating and mapping said set of generic software objects of said public API layer to and from said set of native software objects of said each workflow engine API through an API adapter layer having a plurality of adapters, each of which corresponds to a workflow engine API, wherein each of said plurality of software applications is operable to generate calls understandable by said set of generic software objects of said public API layer, and wherein translated calls are understandable by said at least two heterogeneous workflow engines, and wherein each of said plurality of adapters is operable to translate a generic process definition object into a native process definition object for a corresponding workflow engine of said at least two heterogeneous workflow engines.